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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,405	06/23/2000	Kirkland W. Vogt	5014	9008

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EXAMINER
BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
1771	4

DATE MAILED: 03/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-4

Office Action Summary	Application No.	Applicant(s)	
	09/602,405	VOGT ET AL.	
	Examiner	Art Unit	
	Jenna-Leigh Befumo	1771	

-- The MAILING DATE of this communication appears on the cover sh t with th correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) 1 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 2-21 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claim 1, drawn to a method of making a fabric-elastomer composite, classified in class 427, subclass various.

II. Claims 2 - 21, drawn to a fabric-elastomer composite, classified in class 442, subclass 104.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product can be made by brushing or napping the woven textile fabric before applying the elastomer.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Charlotte Wilson on March 20, 2002 a provisional election was made with traverse to prosecute the invention of Group II, claims 2 - 21. Affirmation of this election must be made by applicant in replying to this Office action. Claim1 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

6. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81. No new matter may be introduced in the required drawing.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 4 – 6, 8, 10, and 17 – 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 4 recites the limitation "said textile fabric" in line 1. There is insufficient antecedent basis for this limitation in the claim. Is the "said textile fabric" the same as the woven fabric? Claims 5 and 6 are similarly rejected. For purposes of examination the "textile fabric" is assumed to be the woven fabric layer.

10. The phrase "said fabric has been calendared after being napped" in claim 8 is indefinite. Is the fabric calendared before or after the elastomer coating is applied to the woven fabric?

11. Claim 10 recites the limitation "the technical back of said fabric" in line 2. There is insufficient antecedent basis for this limitation in the claim.

12. While applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "film" in claim 17 is used by the claim to mean "any thin, sheet-like substrate, comprising either a metallic substrate, a polymeric or plastic substrate, or a felt-like or flocked textile substrate," (as defined on page 12 of the specification) while the accepted meaning is "a thin, flexible layer of continuous polymeric material." It is suggested that the Applicant use a more generic term such as layer or sheet. Claims 18 – 21 are rejected due to their dependence on claim 17.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

14. Claims 2 – 7 and 10 – 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi et al. (4,109,038).

Hayashi et al. discloses a raised woven fabric comprising an elastic polymer coating (abstract). The coating would inherently be partially incorporated into the woven fabric. The woven fabric can be a satin weave (column 6, lines 1 – 8). The woven fabric is raised before the elastomeric polymer is applied to the fabric(column 6, lines 46 – 51). The polymer is applied to the back-side of the surface, or the surface which has the lower amount of raised fibers, if both sides have undergone the raising process (column 7, lines 1 – 3). The warp yarns can be natural materials such as cotton and have a denier from 50 to 300, which is equivalent to a cotton count of 17 – 106 (column 5, lines 49 – 67). The weft yarn has a total denier of 50 to 500, or 10 – 106 denier (column 3, lines 41 – 43). As shown in example 1, the woven fabric has 70 warps/inch and 56 wefts/inch. Therefore, claims 2 – 7 and 10 – 13 are anticipated by Hayashi et al.

15. Claims 2 – 5, 7, 10, 11, and 14 – 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Parker (4,171,391).

Parker discloses producing a composite by impregnating a porous sheet with polyurethane (abstract). At least a portion of the porous sheet material in impregnated with the polyurethane coating (column 3, lines 22 – 24). The coating material is made elastomeric by the addition of long chain polyol (column 5, lines 67 – 68). The porous substrate can be a woven, knit, felt, or non-woven material (column 7, lines 28 – 31). Suitable fibers include natural, cotton fibers (column 7, lines 31 – 32). Parker teaches that woven substrate formed from cotton staple yarns and having a basis weight of 8 oz./yd^2 can be used as the substrate (column 7, lines 61 – 65). In the examples the woven fabric is produced has a 60x80 count (column 12, lines 19 – 20). The fabric is napped before being coated with the polyurethane coating (column 8, lines 3 – 7). Finally, since the fabric samples are coated by dipping as shown in the examples, the

technical back of the fabric would inherently be coated. Therefore, claims 2 – 5, 7, 10, 11, and 14 – 16 are anticipated.

16. Claims 2 – 5 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Taguchi et al. (4,741,075).

Taguchi et al. discloses an artificial substrate material which comprises a fibrous sheet and a binder (abstract). The fibrous sheet material can be a woven sheet (column 3, lines 26 – 31). The fiber used in the woven sheet material can be natural fibers such as wool or cotton (column 3, lines 35 – 40). The binder is an elastomeric polymer which can be sprayed, coated or impregnated onto the fibrous sheet uniformly and allowed to penetrate into the fibrous sheet (column 4, lines 11 – 50). Taguchi et al. teaches that the fibrous sheet is compressed before coating to give the synthetic leather a dense feel. Since the determination of patentability of a product is based on the structural limitations of a product and not dependent on the method limitations, the compressed fibrous substrate taught by Taguchi et al. would have the same condensed structure as Applicant's calendared fabric. Therefore, claims 2 – 5 and 9 are rejected.

17. Claims 2, 17, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa (6,103,047).

Ogawa discloses a three-dimensional molded body comprising a urethane elastomer with a backing material on one side of the elastomer and a surface material on the other side of the elastomer (abstract). The surface material, which corresponds to the Applicant's first material, can a woven fabric sheet (column 4, lines 48 – 51). The urethane elastomer layer corresponds to the Applicant's second material. The woven surface material will inherently be partially impregnated by the elastomer layer since the layers are fixed together using pressure (column 4,

lines 25 – 29). The backing material, which corresponds to the Applicant's third material, is a plastic film (column 5, lines 18 – 19). Thus, claims 2, 17, and 20 are anticipated.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

19. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker.

The features of Parker have been set forth above. Parker fails to teach the cotton count of the warp and weft yarns used in the woven fabric. However, Parker teaches that the choice of substrate and its construction can be made based on the basis of cost, end-use requirements, and other considerations known in the textile and coated fabrics industries (column 7, lines 37 – 41). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to claimed cotton count, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). Therefore, claims 12 and 13 are rejected.

20. Claims 14 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. in view of Parker.

The features of Hayashi et al. and Parker have been set forth above. Hayashi et al. fails to teach the basis weight of the woven support fabric. Parker is drawn to artificial leather materials made from coated elastomeric fabrics. Parker discloses that while the choice of fabric

construction is based on the end-use requirements and price, a woven fabric with a basis weight of 8 oz/yd^2 is a satisfactory substrate for the substrate material. Therefore, it would have been obvious for one having ordinary skill in the art to choose a woven fabric with a basis weight of 8 oz/yd^2 as taught by Parker for the coated substrate in the Hayashi et al. invention since the fabrics have similar end-uses and constructions. Further, as set froth above, that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Therefore, claims 14 – 16 are rejected.

21. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parker in view of Hayashi et al.

The features of Parker and Hayashi et al. have been set forth above. Parker fails to teach using a satin construction for the woven substrate in the coated material. Hayashi et al. is drawn to artificial leather materials made from coated elastomeric fabrics. Hayashi et al. discloses that the satin weave construction is especially preferred in the coated woven substrate because the fabrics have a good appearance and properties as a suede-like fabrics (column 6, lines 1 – 9). Therefore, it would have been obvious for one having ordinary skill in the art to choose a satin weave as the weave pattern for the woven porous substrate in the Parker invention since the satin weave produces a good appearance and good properties when used as a suede-like fabric. Thus, claim 6 is rejected.

22. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker or Hayashi et al. in view of Taguchi et al.

The features of Parker, Hayashi et al., and Taguchi et al. have been set forth above. Parker and Hayashi et al. fail to teach compressing the fabric substrate before adding the

elastomeric coating. Taguchi et al. is drawn to an artificial leather substrate. Taguchi et al. teaches compressing the fibrous substrate prior to applying the elastomeric coating to increase the density of the fabric and improve the feel of the synthetic leather. Therefore, it would have been obvious for one having ordinary skill in the art to compress the fibrous substrate of Parker or Hayashi et al. prior to adding the coating to increase the density of the fabric. Further, compressing the fabric prior to adding the polymeric coating would control the porosity of the fibrous substrate and control the amount of polymeric coating which penetrates into the surface of the substrate. Therefore, claims 8 and 9 are rejected.

23. Claims 17 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker or Hayashi et al. in view of Borri et al. (5,277,969).

The features of Parker and Hayashi et al. have been set forth above. Parker discloses that the artificial leather material can be used in various end-products such as shoe uppers, upholstery, clothing, luggage, book binding and other applications (column 1, lines 27 – 30). Also, Parker teaches that the artificial leather substrate may be combined in laminated structures with foams and fabrics (column 9, lines 35 – 41). However, Parker and Hayashi et al. fail to teach that the elastomer coated substrates can be bonded to a felt substrate, a flocked substrate, a metallic substrate, or a polymeric film. Borri et al. is drawn to artificial leather substrates. Borri et al. discloses that imitation leather materials can be used to form laminates with one or more functional substrates (column 1, lines 25 – 29). A functional substrate is defined as a separately prepared substrate such as a knitted or woven fabric, expanded polymer foam, waterproofing films, paper, etcetera (column 1, lines 30 – 34). Thus, it would have been obvious to one having ordinary skill in the art to laminate one or more additional layers, such as a woven or knitted

fabric, or a film layer, to the artificial leather material taught by Parker or Hayashi et al. to produce various end-products and reinforce or modify the properties of the artificial leather material. Thus, claims 17, 20, and 21 are rejected.

Additionally, it would have been obvious to one having ordinary skill in the art to choose a felt fabric, a flocked fabric, or a metallic substrate as the material laminated to the artificial leather, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Choosing the felt or flocked fabric would produce products with added texture and improved bulk and hand properties. While, the metal substrate would provide a vapor barrier layer to prevent moisture from passing through the laminate or the metallic substrate could act as a support layer to increase the rigidity of the laminate structure for various end-uses such as automobile trim. Therefore claims 18 and 19 are rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (9:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo
March 25, 2002

CHERYL A. JUSKA
PRIMARY EXAMINER